Making decisions using inductive reasoning

People don't always make perfect "rational" decisions. One theory is that people recognize patterns or behaviors that lead to desired outcomes and they apply those patterns to future decisions, even though it may not be optimal to do so. This method of making decisions is *inductive*. For a good description, read the article "*Inductive Reasoning and Bounded Rationality*" by Brian Arthur. It is available on Canvas. Don't be put off by the title; the article is an easy read and it's only 6 pages long. The purpose of this exercise is to experiment with the theory in that article.

1. Look in the NetLogo Models Library under the Sample Models/Social Science folder. Open the "El Farol" model.
2. Read the information about the model.
3. Run the model with the default settings and observe the behavior of bar attendance.
4. Keep memory–size at its default value and vary number–strategies. Set number–strategies to 2, and then set it to 18. Notice the variation in bar attendance for these two settings and explain any difference.
5. Now set number–strategies back to its default value of 10. Set memory–size to 2 and then to 10. Explain any difference.